

ABSTRACT

System and a method for timely interconnecting elements of a wide spread remote measurement, monitoring or data collection system through multiplexing in a satellite system. The invention provides multiplexing features of a satellite system using on-board processing features to gather data from a plurality of remote monitoring stations (4) on any global navigation reference time and multiplex them into a single stream towards one or more computation centres. Each of said computation centers (3) has a down-link adapter (7) capable of extracting a channel from a down-link transmission of a satellite. The data from each of said remote monitoring stations (4) is also passed through an up-link adapter (5) so as to make it suitable for uplink transmission towards a DDBS satellite. Up-link and down-link adapters can be interconnected together to enable loop-back of information such as timing data to monitor transit times.